(See page 56)

Part one

Q1 (b), (c), (d), (e). This history is typical of age-related deafness, but it is too soon to jump straight to prescribing a hearing aid without further examination. Presbycusis does appear to be inherited, but this makes little difference to your diagnosis. The hearing loss may have passed from father to son, but is just as likely to be environmental in cause as genetic.

Part two

Q2 (a). Everything so far suggests that Ade has simple age-related deafness of which the 'ski-slope' audiogram pattern is typical. Unilateral hearing loss is unlikely when a patient complains of recent-onset deafness, as the 'good' ear can hide the fact that the 'bad' ear function has been lost. It is only when the 'good' ear starts to deteriorate too that the patient appreciates that he has become deaf. Most cases of presbyopia show equal loss in the two ears. Damaged hearing due to excess exposure to noise causes specific loss in a narrow range related to the frequency of the sound to which the patient has been exposed (drums are at relatively low frequencies).

Part three

Q3 (b), (e). Asymmetrical hearing loss must be taken further. It may be the only sign of acoustic neuroma, which is best initially investigated by skull X-ray. The tumour may show widening of the acoustic neural canal caused by expansion of the tumour, possibly over years. You would expect balance problems if he had Meniere's disease. He has shown no sign of them.

Part four

Q4 (a), (b), (c), (d). All these steps are useful in trying to achieve better hearing for Ade. However, you should still refer him to an ear, nose and throat (ENT) specialist. Audiograms alone are not enough to rule out other causes of his deafness. Remember that he has been hearing his pulse in his right ear, and there is slight tinnitus. To be safe, and to avoid missing a carotid aneurysm, it would be best to refer to an ENT specialist.

Happily, Ade had presbycusis, and is doing well with his hearing aids.